**Summary**

In client-server applications, the server provides some service and the client uses the service provided by the server. In this project the server and client exchange messages. The server maintains messages posted by clients, which clients can retrieve and view. Sockets were used for communication. A socket is one end-point of a two-way communication link between two programs running on the network.  Socket classes are used to represent the connection between a client program and a server program.

We did the project in Java. We have referred the code shared by the professor for creating sockets and establishing a connection between the client and server. We used threads to create any number of instances of server to connect and handle any number of clients. For each client-server connection there is a unique socket and thread.

After a client connects to the server it can view all the connected users and send messages to other clients. To handle these cases we have used “switch” statement. Based on client’s request the server responds accordingly.

We ran the code in command prompt and created a server and multiple clients. We tested all the test cases.We were able to run the project successfully with any number of clients connected to server and exchange messages between the client and server and also sending messages between clients through server.

Communicating between two processes was very interesting and we have learnt a lot of new things about networking and how it is done.